MTS2AUSA

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of	) Group Art Unit:
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Janet Rossant et al	) Examiner:
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Appln. No.	)
	)
Filed: Herewith	)
	)
For: TROPHOBLAST CELL PREPARATIONS	)

Mail Stop Patent Application
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

PRELIMINARY AMENDMENT

Sir:

Please amend the above-identified patent application as follows.

In the Claims

Cancel claims 6, 21 and 22 without prejudice.

1 (Original). A stable pluripotent trophoblast stem (TS) cell line.

2 (Original). A purified preparation of trophoblast stem cells which (i) are capable of indefinite proliferation in vitro in an undifferentiated state; and (ii) are capable of differentiation into cells of the trophoblast lineage *in vivo*.

3 (Original). A purified preparation as claimed in claim 2 which is further characterized by expression of genetic markers of diploid trophoblast cells.

4(Original). A purified preparation as claimed in claim 2 wherein the cells are differentiated into cells of the trophoblast lineage.

5(Original). A purified cell preparation as claimed in claim 4 characterized by

expression of genetic markers of diploid trophoblast cells of the ectoplacental cone (EPC), and the secondary giant cells of the early conceptus.

Claim 6 currently cancelled.

7(Original). A purified cell preparation as claimed in claim 6 modified by introducing mutations into genes in the cells or by introducing transgenes into the cells.

8(Original). A method for producing a trophoblast cell line comprising culturing early postimplantation trophoblast cells or cells of a blastocyst on a feeder layer in the presence of FGF4, and a co-factor.

9(Original). A method as claimed in claim 8 additionally comprising inducing differentiation of the cells of the cell line to cells of the trophoblast lineage by removing the FGF4, the co-factor, or the feeder layer.

10(Original). A method as claimed in claim 8 wherein the early postimplantation trophoblast cells or cells of a blastocyst are isolated from a mammalian or marsupial species.

11(Original). A method as claimed in claim 8 wherein the early postimplantation trophoblast cells or cells of a blastocyst are isolated from a rodent, rabbit, sheep, goat, pig, cattle, primate, or human.

12 (Original). A method as claimed in claim 8 wherein the early postimplantation trophoblast cells or cells of a blastocyst are transgenic.

13 (Original). A method as claimed in claim 8 wherein the feeder layer is a confluent fibroblast layer or a medium conditioned by primary embryonic fibroblast cells.

14 (Original). A method as claimed in claim 8 wherein the feeder layer comprises primary mouse embryonic fibroblast (EMFI) cells or STO cells.

15 (Original). A method as claimed in claim 8 wherein the FDF4 is recombinant FGF4 and the cofactor is heparin.

16 (Original). A method as claimed in claim 8 which further comprises introducing cells from the cell line into a blastocyst or aggregating the cells with an early stage embryo to produce chimeric conceptuses or placenta.

17(Original). A method as claimed in claim 16 wherein the chimeric conceptuses or placenta are engineered to carry selectable markers or genetic alterations.

18 (Original). A method as claimed in claim 16 wherein cell lines are derived from the chimeric conceptuses or chimeric placenta.

19 (Original). A chimeric conceptus derived from a purified preparation as claimed in claim 2.

20 (Original). A chimeric placenta derived from a purified preparation as claimed in claim 2.

Claims 21 and 22 are currently cancelled.

23 (Original). A method as claimed in claim 22 wherein the mammal is a human.